



## M A T E R I A L   S A F E T Y   D A T A   S H E E T

<b><u>Identification of substance</u></b>  <b>O2</b>	<b>Trade Name</b>  <b>Oxygen</b>	<b>Manufacturer:</b> OXYGASES LLC. PO Box - 89968, AL Ghail Industrial Zone, R.A.K, U.A.E.  EMERGENCY TELEPHONE NUMBER +971 7 2216029, +971 50 235 3677
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### **General**

Oxygen constitutes are approximately by 21% of the air. It is a colorless, odorless and tasteless gas. Oxygen is supplied both as liquid and as compressed gas.

Oxygen is produced by air separation processes that use either cryogenic liquefaction and distillation or vacuum swing adsorption (VSA) separation.

Oxygen can be stored and shipped as either a gas or a cryogenic liquid.

### **Applications**

The principal uses of Oxygen are due to its strong oxidizing and life-sustaining properties. It is used in medicine for therapeutic purposes. In line with these characteristics, following are the most common applications:

- Steelmaking
- Oxidation
- Breathing
- Metal cutting
- Glassmaking
- Bleaching
- Production of fuels and chemicals





## Hazards Identifications

### **Hazard description:**

Compressed gas oxidant. Combustibles in contact with liquid Oxygen may explode on ignition or impact. Can cause severe frostbite.



Information pertaining to particular dangers for man and environment:  
Contact with combustible material may cause fire.

Danger	Warning
 <p data-bbox="250 1039 724 1066">May cause or intensify fire; oxidizer.</p>	 <p data-bbox="883 1045 1435 1104">Contains gas under pressure; may explode if heated.</p>

### **Prevention:**

Keep / Store away from clothing / combustible materials. Keep reduction valves free from grease and oil.

### **Response:**

In case of fire: Stop leak if safe to do so.

### **Handling and Storage:**

Use no oil or grease. Do not store in a confined space.

Open valve slowly to avoid pressure shock.

Post “No Smoking” AND “ No Open Flames” signs in the storage area.

Do not drop, tip or roll containers on their side.

# Oxygases

Keep container below 50°C in a well ventilated place.

Never allow any unprotected part of the body to touch un-insulated pipes or vessels which contain cryogenic fluids.

Protect from sunlight. Store in a well-ventilated place.

## **First Aid Measures:**

After inhalation : Supply fresh air; consult doctor in case of complaints.

After skin contact : Generally the product does not irritate the skin.

After eye contact: Rinse opened eye for at least 15minutes under running water.

Then consult a doctor.

After swallowing: Not applicable

## **Fire Fighting Measures:**

Suitable extinguishing agents:

CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

## **Protective Equipment:**

Wear self-contained respiratory protective device.

## **Transport Information**

DOT Hazard Class	Non Flammable 2.2
DOT Identification Number	UN1072
DOT / IMO Name	Oxygen Compressed
Shipping Label	Nonflammable Gas





### **Physical and Chemical Properties**

Form	Gaseous
Appearance	Colour less
Odor	Odorless
Physical Pressure	Gas
Vapour Pressure	N/Ap
Vapor Density (Air = 1)	@25Deg C 1.105
Boiling Point	-183°C
Solubility in water	4.89 cm <sup>3</sup> /100 cm <sup>3</sup>
Specific Gravity (H <sub>2</sub> O =1)	Gas
Evaporation Rate	Gas
Odor Threshold	None